

(12) United States Patent **Bennett**

AND A GAMING APPARATUS

(54) METHOD OF GAMING, A GAMING SYSTEM

(75) Inventor: Nicholas Luke Bennett, Manly Vale

Assignee: ARISTOCRAT TECHNOLOGIES

AUSTRALIA PTY LIMITED, North

Ryde (AU)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 200 days.

(21) Appl. No.: 13/547,217

(22)Filed: Jul. 12, 2012

Prior Publication Data (65)

> US 2012/0276985 A1 Nov. 1, 2012

Related U.S. Application Data

(63) Continuation of application No. 12/365,553, filed on Feb. 4, 2009, now Pat. No. 8,241,136.

(30)Foreign Application Priority Data

Feb. 4, 2008 (AU) 2008900490

(51) Int. Cl. A63D 15/20 A63B 24/00

(2006.01)(2006.01)

A63B 43/00 A63D 15/00

(2006.01)(2006.01)

(52) U.S. Cl.

CPC A63D 15/20 (2013.01); A63B 24/0021 (2013.01); A63B 43/00 (2013.01); A63D 15/00 (2013.01); A63B 2024/0028 (2013.01); A63B 2225/50 (2013.01); A63B 2225/54 (2013.01); A63B 2243/002 (2013.01)

(45) Date of Patent:

US 9,089,764 B2

(10) Patent No.:

Jul. 28, 2015

(58) Field of Classification Search

CPC A63B 2243/002 See application file for complete search history.

(56)**References Cited**

U.S. PATENT DOCUMENTS

4,516,770 A 5/1985 Brookes et al. 5,026,053 A 6/1991 Paterson et al. 5.066,008 A 11/1991 Rivera (Continued)

FOREIGN PATENT DOCUMENTS

EP 1759743 3/2007 GB 2432126 5/2007 (Continued)

United States Patent and Trademark Office, "Notice of Allowance," issued in connection with U.S. Appl. No. 12/365,553, mailed on Apr.

OTHER PUBLICATIONS

13, 2012, 24 pages.

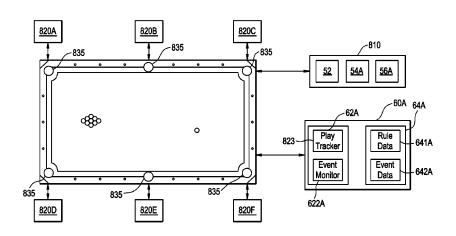
(Continued)

Primary Examiner — Seng H Lim (74) Attorney, Agent, or Firm - Hanley, Flight and Zimmerman, LLC

ABSTRACT

A method of gaming comprising: providing a table game of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game; receiving a wager from a player additional to any amount required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event; and electronically monitoring play of the table game to determine whether the player achieves the event and the bonus should be awarded to the player.

12 Claims, 7 Drawing Sheets



US 9,089,764 B2

Page 2

2007/0102877 A1 5/2007 Personius et al. (56)**References Cited** 2007/0155519 A1 7/2007 Panzica U.S. PATENT DOCUMENTS 2008/0182675 A1 7/2008 Flores 5,135,218 A * 8/1992 McGovern 473/7 FOREIGN PATENT DOCUMENTS 5,544,892 A * 8/1996 5,655,961 A * 2007029752 20010069888 8/1997 2/2007 7/2001 JP 6,210,277 B1 * 6,276,689 B1 6,875,120 B1 6,986,714 B2 * 7,063,620 B2 4/2001 Stefan 463/27 KR 8/2001 Brown WO 0126760 4/20014/2005 Ellis WO 2007009188 1/2007 1/2006 Porper et al. 473/1 WO 2008099194 8/2008 6/2006 Nearhood OTHER PUBLICATIONS 2003/0114235 A1* 6/2003 Porper et al. 473/1 2004/0053686 A1 3/2004 Pacey et al. 2005/0037832 A1* 2/2005 Cannon 463/18 United States Patent and Trademark Office, "Non-Final Office 2006/0003830 A1 1/2006 Walker et al. Action," issued in connection with U.S. Appl. No. 12/365,553, 2006/0063599 A1 3/2006 Greenspan mailed on Jun. 20, 2011, 13 pages. 6/2006 7/2006 2006/0135254 A1* Australian Patent Office "Examiner's Report," issued in connection 2006/0154718 A1 with Australian Patent No. 2009200364, mailed on Jun. 9, 2010, 4 2006/0199656 A1 9/2006 McGovern 2006/0276271 A1 12/2006 Hamann 2007/0026956 A1* 2/2007 Pearson 473/1 2007/0066411 A1 3/2007 Gulyassy * cited by examiner

FIG. 1

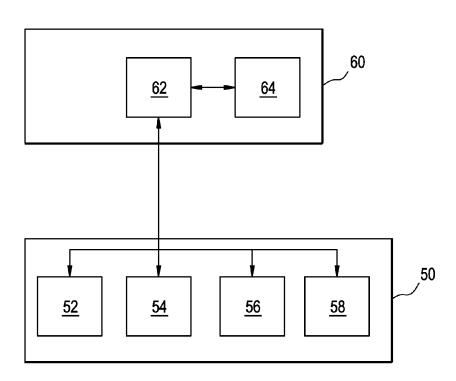
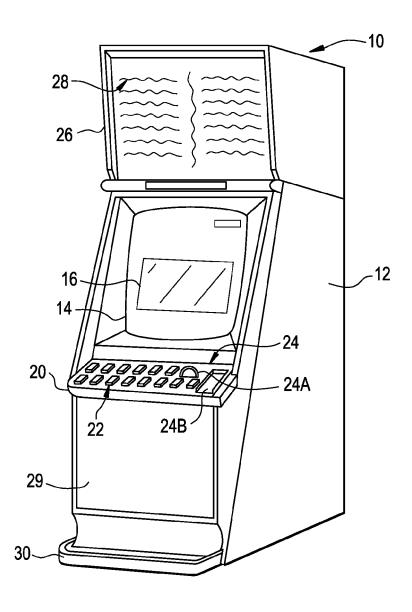


FIG. 2



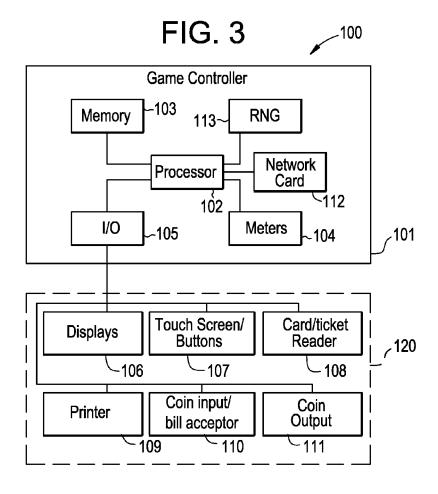


FIG. 4

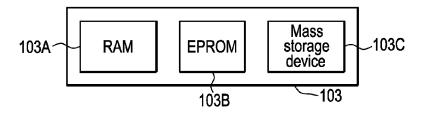
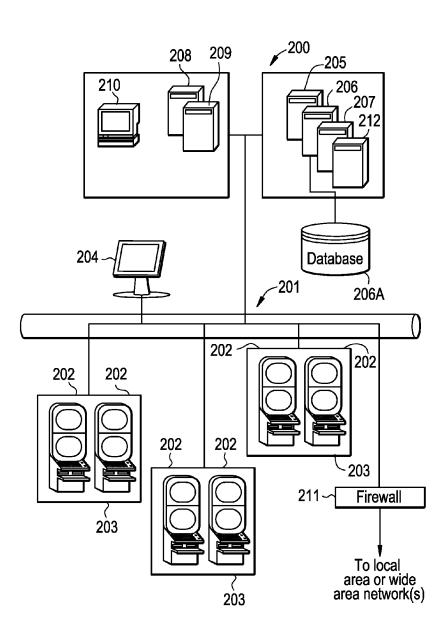


FIG. 5



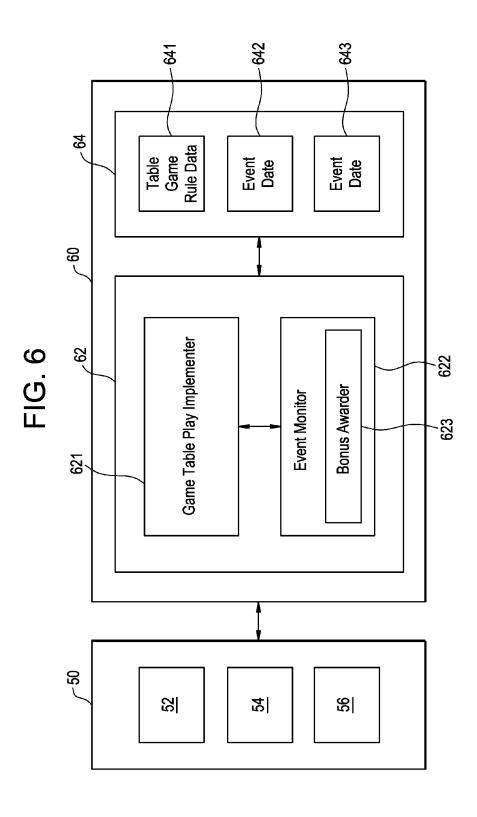
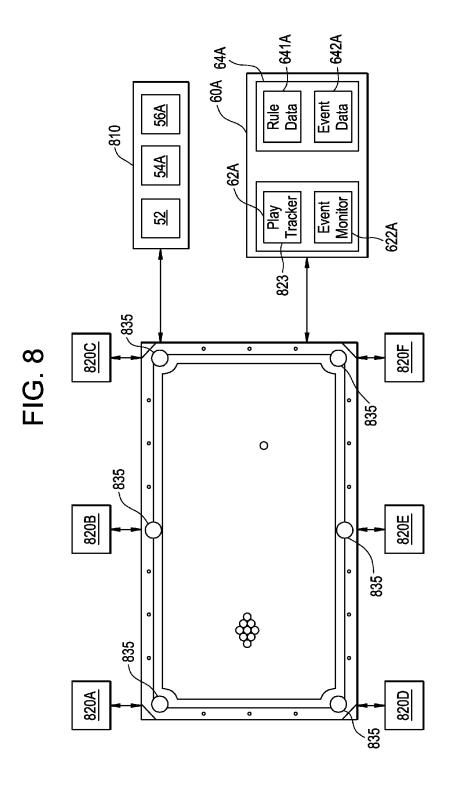


FIG. 7 Notify designated **700** 700 events Receive additional bet 710 from player Player has entitlement to bonuses associated √715 with events **~720** Game Finished? N N 725 730 735 În-game Υ Υ Award Offer in-game event event Bonuses achieved N 740 Designated **Event** Acheived -745 Award **~750 END** Bonus



METHOD OF GAMING, A GAMING SYSTEM AND A GAMING APPARATUS

FIELD

The invention relates to a method of gaming, a gaming system, and a gaming apparatus.

BACKGROUND

Pool tables are used by players to play table games which have as their object, the sinking of balls in pockets of the pool table in accordance with the rules of the game. Typically, players strike a cue ball with a cue to attempt to cause a target ball to be sunk in one of the pockets.

Virtual pool table games are also known, where a player operates electronic controls to attempt to strike and sink balls on a virtual representation of a pool table.

There is a need to provide further enjoyment in relation to table games.

SUMMARY OF THE INVENTION

In a first aspect, the invention provides a method of gaming including:

providing a table game of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game;

receiving a wager from a player additional to any amount 30 required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event; and

electronically monitoring play of the table game to determine whether the player achieves the event and the bonus 35 table game. Should be awarded to the player.

In an emb

In an embodiment, there are a plurality of bonuses associated with respective ones of a plurality of different events.

In an embodiment, an event includes a plurality of sub-

In an embodiment, the method includes notifying each event to the player prior to commencement of play of the table game.

In an embodiment, the method includes notifying each event to the player subsequent to receipt of the wager.

In an embodiment, the method includes notifying the player of an opportunity to achieve an event and receiving the wager as a response to the offer.

In an embodiment, different wager amounts entitle the player to play for different bonuses.

In an embodiment, the table game is provided as a video game implemented by a game controller having an associated player interface including a display for displaying the table game and a game play mechanism operable by the player to make a wager and play the game.

In an embodiment, the table game is provided as a physical table, the method further including providing a monitoring mechanism arranged to monitor for the event, a game play mechanism operable by the player to make a wager, and a game controller arranged to make the bonus award to the 60 player if the player achieves the event.

In an embodiment, the event is selected from the group including:

the order in which the balls are sunk into any of the pockets; the order in which the balls are sunk into specific pockets; 65 the order in which a certain subset of the balls are sunk into any pocket; and 2

the order in which a certain subset of balls are sunk into specific pockets.

In a second aspect, the invention provides a gaming system including:

a player interface including a display and a game play mechanism;

a game controller arranged to:

conduct a table game and display the table game on the display, the table game being of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game by operating the game play mechanism;

receive a wager from a player additional to any amount required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event; and

monitor play of the table game to determine whether the player achieves the event and the bonus should be awarded to the player.

In an embodiment, the game controller includes a table game play implementer arranged to implement play of the table game.

In an embodiment, the game controller includes an event monitor arranged to monitor for the occurrence of an event.

In an embodiment, the game controller includes a bonus awarder arranged to make an award to the player.

In an embodiment, there are a plurality of bonuses associated with respective ones of a plurality of different events.

In an embodiment, an event includes a plurality of subevents.

In an embodiment, the gaming system is arranged to notify each event to the player prior to commencement of play of the table game.

In an embodiment, the gaming system is arranged to notify each event to the player subsequent to receipt of the wager.

In an embodiment, the gaming system is arranged to notify the player of an opportunity to achieve an event and receive the wager as a response to the offer.

In an embodiment, different wager amounts entitle the player to play for different bonuses.

In an embodiment, the event is selected from the group including:

the order in which the balls are sunk into any of the pockets; the order in which the balls are sunk into specific pockets; the order in which a certain subset of the balls are sunk into any pocket; and

the order in which a certain subset of balls are sunk into specific pockets.

In a third aspect, the invention provides a gaming apparatus including:

a table including a plurality of pockets, the table adapted for play of a table game of the type where a player seeks to sink one or more balls of a set of balls in one or more of the pockets by striking the balls with a cue ball in accordance with the rules of the table game;

an game play mechanism operable by the player to make a wager additional to any amount required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event: and

a monitoring mechanism arranged to electronically monitor play of the table game to enable a determination of whether the player achieves the event; and

a game controller arranged make the bonus award to the player if the player achieves the event.

10

20

50

In an embodiment, the monitoring mechanism is arranged to determine the pocket in which a ball is sunk and the identity of the sunk ball.

In an embodiment, the monitoring device includes a plurality of identification readers associated with respective ones of the plurality of pockets and each ball carries identification data readable by the identification readers.

In an embodiment, the identification readers are radio frequency (RF) readers adapted to read radio frequency identification (RFID) tags embedded in the balls.

In an embodiment, there are a plurality of bonuses associated with respective ones of a plurality of different events.

In an embodiment, an event includes a plurality of subevents.

In an embodiment, the gaming apparatus is arranged to 15 notify each event to the player prior to commencement of play of the table game.

In an embodiment, the gaming apparatus is arranged to notify each event to the player subsequent to receipt of the wager.

In an embodiment, the gaming apparatus is arranged to notify the player of an opportunity to achieve an event and receive the wager as a response to the offer.

In an embodiment, different wager amounts entitle the player to play for different bonuses.

In a fourth aspect, the invention provides a game controller for a gaming system, the game controller arranged to:

conduct a table game and display the table game on the display, the table game being of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game by operating a game play mechanism;

receive a wager from a player additional to any amount required to play the table game, the wager entitling the 35 player to receive at least one bonus associated with an event if the player achieves the event; and

monitor play of the table game to determine whether the player achieves the event and the bonus should be awarded to the player.

In a fifth aspect, the invention provides computer program code which when executed implements the above method.

In a sixth aspect, the invention provides a computer readable medium including the above computer program code.

In a seventh aspect, the invention provides a data signal 45 including computer program code which when executed implements the above method.

In an eighth aspect, the invention extends to transmitting computer program code which when executed implements the above method.

BRIEF DESCRIPTION OF DRAWINGS

Exemplary embodiments are described in conjunction with the following drawings in which:

FIG. 1 is a block diagram of the core components of a gaming system of an electronic embodiment.

FIG. 2 is a perspective view of a stand alone gaming machine;

FIG. 3 is a block diagram of the functional components of 60 a gaming machine;

FIG. 4 is a schematic diagram of the functional components of a memory;

FIG. 5 is a schematic diagram of a network gaming system;

FIG. 6 is a further block diagram of the gaming system;

FIG. 7 is a flow chart of an embodiment; and

FIG. 8 is a block diagram of a physical embodiment.

4

The foregoing summary, as well as the following detailed description of certain embodiments of the present invention, will be better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, certain embodiments are shown in the drawings. It should be understood, however, that the present invention is not limited to the arrangements and instrumentality shown in the attached drawings.

DETAILED DESCRIPTION

Referring to the drawings, there is shown a gaming system and a gaming apparatus arranged to implement a table game where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game. The gaming system and gaming apparatus allow a player to make a wager in addition to any amount required to play the table game. The wager entitles the player to one or more bonuses if 20 the player achieves an event associated with the bonus. The concept can be extended to more than one player. The table game may be, for example 8 Ball pool, 9 ball pool or variants thereof. Common to such games is that a player uses a cue to strike a cue ball in an attempt to sink a target ball in one of the pockets of the table. The rules as to which balls are valid target balls at various stages of the game vary from game to game. Such games can be implemented electronically by displaying a virtual table on a video display and allowing the player to operate a virtual cue stick.

The balls used in such games vary from game to game. In one common implementation of 8 Ball pool, there is a white cue ball and 15 coloured balls each of which bears one of the numbers 1-15 such that each ball is individually identifiable. The balls 1-7 are often known as "solids" as they are entirely of one colour with the exception of an area around the number and the number itself. Each of balls 1-7 is also a different colour (but not black). The 8-Ball is black. Balls 8-15 are often known as "stripes" because they are formed of a coloured portion that extends around an equatorial region of 40 the ball and two white polar portions. Again balls 8-15 are individually coloured (often with the same colours of balls 1-7). Typically, the table is rectangular and has 6 pockets with 4 pockets at respective ones of the corners and 2 pockets positioned midway along respective ones of the longer sides of the tables, however many other tables (whether physical or virtual) have been proposed which could be adapted for use in an embodiment, including round tables, hexagonal tables, L-shaped tables etc.

The gaming apparatus has a physical table with a plurality of pockets and associated electronic components implementing the game. The game can also be implemented electronically as a gaming system.

Gaming Systems—Exemplary Electronic Embodiments

The gaming system can take a number of different forms. In a first form, a stand alone gaming machine is provided wherein all or most components implementing the game are present in a player operable gaming machine.

In a second form, a distributed architecture is provided wherein some of the components implementing the game are present in a player operable gaming machine and some of the components implementing the game are located remotely relative to the gaming machine. For example, a "thick client" architecture may be used wherein part of the game is executed on a player operable gaming machine and part of the game is executed remotely, such as by a gaming server; or a "thin client" architecture may be used wherein most of the game is executed remotely such as by a gaming server and a player

operable gaming machine is used only to display audible and/or visible gaming information to the player and receive gaming inputs from the player.

However, it will be understood that other arrangements are envisaged. For example, an architecture may be provided wherein a gaming machine is networked to a gaming server and the respective functions of the gaming machine and the gaming server are selectively modifiable. For example, the gaming system may operate in stand alone gaming machine mode, "thick client" mode or "thin client" mode depending on the game being played, operating conditions, and so on. Other variations will be apparent to persons skilled in the art.

Irrespective of the form, the gaming system includes several core components. At the broadest level, the core components are a player interface 50 and a game controller 60 as illustrated in FIG. 1. The player interface is arranged to enable interaction between a player and the gaming system and for this purpose includes the input/output components for the player to enter instructions and play the game.

Components of the player interface may vary from embodiment to embodiment but will typically include a credit mechanism 52 to enable a player to input credits and receive payouts, one or more displays 54, a game play mechanism 56 including one or more input devices that enable a player to 25 input game play instructions (e.g. to place a wager), and one or more speakers 58. The display displays a virtual table having a plurality of pockets. The game play mechanism 56 is arranged to allow a player to play the table game—i.e. to input instructions—in particular to operate a virtual cue to align it to an intended shot and strike the cue ball in an attempt to strike one of the target balls and sink it in a pocket displayed on the display.

The game controller 60 is in data communication with the $_{35}$ player interface and typically includes a processor 62 that processes the game play instructions in accordance with game play rules and outputs game play outcomes to the display. Typically, the game play instructions are stored as program code in a memory 64 but can also be hardwired. Herein 40 the term "processor" is used to refer generically to any device that can process game play instructions in accordance with game play rules and may include: a microprocessor, microcontroller, programmable logic device or other computational device, a general purpose computer (e.g. a PC) or a 45

A gaming system in the form of a stand alone gaming machine 10 is illustrated in FIG. 2. The gaming machine 10 includes a console 12 having a display 14 on which are displayed representations of the game 16—e.g., including an 50 image of a pool table having a plurality of pockets with balls placed according to the current state of the game. A mid-trim 20 of the gaming machine 10 houses a bank of buttons 22 for enabling a player to interact with the gaming machine, in virtual shots as well as to place wagers. For example, one or more buttons may be operable to adjust the position of the cue stick relative to the cue ball and one or more buttons may be operable to adjust the strength with which the cue strikes the cue ball. The mid-trim 20 also houses a credit input mecha- 60 nism 24 which in this example includes a coin input chute **24**A and a bill collector **24**B. Other credit input mechanisms may also be employed, for example, a card reader for reading a smart card, debit card or credit card. A player marketing module (not shown) having a reading device may also be 65 provided for the purpose of reading a player tracking device, for example as part of a loyalty program. The player tracking

6

device may be in the form of a card, flash drive or any other portable storage medium capable of being read by the reading

A top box 26 may carry artwork 28, including for example pay tables and details of bonus awards and other information or images relating to the game. Further artwork and/or information may be provided on a front panel 29 of the console 12. A coin tray 30 is mounted beneath the front panel 29 for dispensing cash payouts from the gaming machine 10.

The display 14 shown in FIG. 2 is in the form of a video display unit, particularly a cathode ray tube screen device. Alternatively, the display 14 may be a liquid crystal display, plasma screen or any other suitable video display unit. The top box 26 may also include a display, for example a video display unit, which may be of the same type as the display 14, or of a different type. The top box 26 may be used to advertise the events achievable by the player.

FIG. 3 shows a block diagram of operative components of 20 a typical gaming machine which may be the same as or different to the gaming machine of FIG. 2.

The gaming machine 100 includes a game controller 101 having a processor 102. Instructions and data to control operation of the processor 102 are stored in a memory 103, which is in data communication with the processor 102. Typically, the gaming machine 100 will include both volatile and non-volatile memory and more than one of each type of memory, with such memories being collectively represented by the memory 103.

The gaming machine has hardware meters 104 for purposes including ensuring regulatory compliance and monitoring player credit, an input/output (I/O) interface 105 for communicating with peripheral devices of the gaming machine 100. The input/output interface 105 and/or the peripheral devices may be intelligent devices with their own memory for storing associated instructions and data for use with the input/output interface or the peripheral devices. A random number generator module 113 generates random numbers for use by the processor 102. Persons skilled in the art will appreciate that the reference to random numbers includes pseudo-random numbers.

In the example shown in FIG. 3, a player interface 120 includes peripheral devices that communicate with the game controller 101 include one or more displays 106, input devices in the form of a touch screen and/or buttons 107, a card and/or ticket reader 108, a printer 109, a bill acceptor and/or coin input mechanism 110 and a coin output mechanism 111. Additional hardware may be included as part of the gaming machine 100, or hardware may be omitted based on the specific implementation. For example, alternative or additional input devices enabling the player to input instructions may be included such as a joy stick controller for adjusting the

In addition, the gaming machine 100 may include a comparticular during game play to align the virtual cue and play 55 munications interface, for example a network card 112. The network card may, for example, send status information, accounting information or other information to a central controller, server or database and receive data or commands from the central controller, server or database.

> FIG. 4 shows a block diagram of the main components of an exemplary memory 103. The memory 103 includes RAM 103A, EPROM 103B and a mass storage device 103C. The RAM 103A typically temporarily holds program files for execution by the processor 102 and related data. The EPROM 103B may be a boot ROM device and/or may contain some system or game related code. The mass storage device 103C is typically used to store game programs, the integrity of

which may be verified and/or authenticated by the processor 102 using protected code from the EPROM 103B or else-

It is also possible for the operative components of the gaming machine 100 to be distributed, for example input/ output devices 106,107,108,109,110,111 to be provided remotely from the game controller 101.

FIG. 5 shows a gaming system 200 in accordance with an alternative embodiment. The gaming system 200 includes a network 201, which for example may be an Ethernet network. 10 Gaming machines 202, shown arranged in three banks 203 of two gaming machines 202 in FIG. 5, are connected to the network 201. The gaming machines 202 provide a player operable interface and may be the same as the gaming machines 10,100 shown in FIGS. 2 and 3, or may have sim- 15 plified functionality depending on the rules and/or guidelines for implementing game play. While banks 203 of two gaming machines are illustrated in FIG. 5, banks of one, three or more gaming machines are also envisaged.

One or more displays 204 may also be connected to the 20 network 201. For example, the displays 204 may be associated with one or more banks 203 of gaming machines. The displays 204 may be used to display representations associated with game play on the gaming machines 202, and/or used to display other representations, for example promotional or 25 informational material.

In a thick client embodiment, game server 205 implements part of the game played by a player using a gaming machine 202 and the gaming machine 202 implements part of the game. With this embodiment, as both the game server and the 30 gaming device implement part of the game, they collectively provide a game controller. A database management server 206 may manage storage of game programs and associated data for downloading or access by the gaming devices 202 in a database 206A. Typically, if the gaming system enables 35 players to participate in a Jackpot game, a Jackpot server 207 will be provided to perform accounting functions for the Jackpot game. A loyalty program server 212 may also be provided.

In a thin client embodiment, game server 205 implements 40 most or all of the game played by a player using a gaming machine 202 and the gaming machine 202 essentially provides only the player interface. With this embodiment, the game server 205 provides the game controller. The gaming machine will receive player instructions, pass these to the 45 game server which will process them and return game play outcomes to the gaming machine for display. In a thin client embodiment, the gaming machines could be computer terminals, e.g. PCs running software that provides a player interface operable using standard computer input and output com- 50 ponents.

Servers are also typically provided to assist in the administration of the gaming network 200, including for example a gaming floor management server 208, and a licensing server 209 to monitor the use of licenses relating to particular games. 55 certain "free" bonuses which are either made available irre-An administrator terminal 210 is provided to allow an administrator to run the network 201 and the devices connected to the network.

The gaming system 200 may communicate with other gaming systems, other local networks, for example a corporate network, and/or a wide area network such as the Internet, for example through a firewall 211.

Persons skilled in the art will appreciate that in accordance with known techniques, functionality at the server side of the network may be distributed over a plurality of different com- 65 puters. For example, elements may be run as a single "engine" on one server or a separate server may be provided. For

example, the game server 205 could run a random generator engine. Alternatively, a separate random number generator server could be provided. Further, persons skilled in the art will appreciate that a plurality of game servers could be provided to run different games or a single game server may run a plurality of different games based on the terminals.

FIG. 6 shows a gaming system in more detail. A player uses credit mechanism 52 to input credit. The player then operates game play mechanism 56 to pay an entry amount to play the table game, for example by pressing a button or touch screen. The entry amount causes the game controller to activate the table game play implementer module 621, a software routine implemented by processor 62 on the basis of table game rule data 641 stored in memory 64. The game controller 60 controls display 54 to inform the player that they may make a wager to be eligible for bonuses associated with the table game and the player operates game play mechanism 56 to make a wager. The game controller 60 then activates event monitor module 622 which monitors for the events specified by event data 642 in memory 64. That is, it monitors the game play implemented by table game play implementer module **621** to determine whether an event is achieved by a player. If an event is achieved, the bonus awarder 623 operates to advise the player on display 54 that a bonus award has been won. If the bonus is game credits, the bonus awarder 623 updates the meter data 643 to reflect the award.

Appropriate events may be designed to fit the table game in relation to which the bonus is to be awarded. For example, the event may be:

the order in which the balls are sunk into any of the pockets; the order in which the balls are sunk into specific pockets; the order in which a certain subset of the balls are sunk into any pocket; or

the order in which a certain subset of balls are sunk into specific pockets.

It will be appreciated that an event may be composed of a number of sub-events. Typically, the event is chosen so as to be outside the normal rules, such that a player cannot achieve the event in normal play of the game. For example, an event where balls are sunk in order is not as suited to 9-Ball Pool where the normal game rules require the player to shoot at numbered balls in order such that it is not unusual for the balls to be sunk in order. In an embodiment, all events are notified in advance.

In another embodiment, in-game events may be notified during play instead of or in addition to notifying designated events before play. For example, by nominating a designated ball and a designated pocket as an event prior to the player's turn. Such events may run contrary to events advertised at the beginning of the table game, so that, for example if a player achieves the in-game event they may no longer be able to achieve another event, however, the in-game event may be easier to achieve.

In addition to the above, the player may be entitled to spective of the wager amount or irrespective of whether a wager is made. Typically such bonuses will be of a more minor nature. Different wagers may also entitle a player to play to achieve different or more events.

In multi-player embodiments, each player will be able to place a wager and the gaming controller arranged to nominate which player is to play on display 54. Exemplary Method

The method 700 is summarised in FIG. 7. The player is notified 705 of designated events that can be achieved. The player makes a wager 710 and becomes entitled 715 to bonuses associated with the events.

The game then begins with the game controller 60 monitoring for events until it determines that the game is finished 720. If the embodiment provides for in-game events, the game controller 60 determines 725 whether to offer an in-game event: for example, based on a random determination prior to each player turn. If an in-game event is offered, it is determined 730 whether it is achieved and if it is achieved a bonus is awarded 735.

The game continues until it is determined **720** that the game has finished, whereafter it is determined **740** whether a predesignated event has been achieved during the game. If an event has been achieved, the bonus is awarded **745** and the game ends **750**.

Further features of the method will be apparent from the above description of the gaming system. Persons skilled in 15 the art will also appreciate that the method could be embodied in program code. The program code could be supplied in a number of ways, for example on a computer readable medium, such as a disc or a memory (for example, that could replace part of memory 103) or as a data signal (for example, 20 by downloading it from a server).

Gaming Apparatus—Exemplary Physical Embodiment

As illustrated in FIG. **8**, in a physical embodiment (although it will be appreciated that some components are implemented electronically), a gaming apparatus **800** may be 25 formed by replacing the player interface of electronic embodiments with an actual pool table **830** having a plurality of pockets **835**, a monitoring mechanism **820** which is able to determine which balls are pocketed in which pocket, and a terminal **810** having a credit mechanism **52**A that may be any 30 appropriate device for entering credits such as those exemplified above, and a wagering mechanism **56**A, for example buttons or a touch screen interface or other appropriate input device for making a wager. A modified gaming controller **60**A implements the other requirements of the gaming apparatus.

In embodiments, where events are advertised in advance, it may be sufficient to provide signage proximate to the gaming machine advising players of the events. In other embodiments, display **54**A is used to notify the events to players in much the same way as in the electronic embodiment 40 described above as well as to inform players that bonuses have been awarded.

Accordingly, the game controller **60**A may be implemented in a similar manner to that described above in relation to a gaming machine, with modifications to take into account 45 what is in effect a different player interface. In particular, as shown in FIG. **8**, the game controller **60**A is only required to track game play with game play tracker **823** based on the game rule data **641**A stored in memory **64**A rather than implementing the game as shown in FIG. **6**. The game tracker **823** ensures that game rules are being complied with and determines which player is currently playing in multi-player games, based on the game rules. The display **54**A may advise the players whose turn it is.

In this embodiment, the monitoring mechanism includes a plurality of radio frequency tag readers **820** adapted to read radio frequency tags embedded in the balls which identify the balls. The tag readers **820** communicate to the game controller **60** which balls have been read as being sunk is which pocket, whereby the event monitor **622**A of the game controller can determine whether an event has been achieved and award bonuses as described above in relation to FIG. **6**. In other embodiments, an alternate monitoring mechanism may be used, for example one or more cameras and associated image processing apparatus for resolving the identity of the balls or by placing indicia such as barcodes on the balls which can read automatically by a bar code reader. Persons skilled in

10

the art will appreciate that any appropriate device can be used for the monitoring mechanism provided it can identify individual balls which have entered the pockets based on inherent characteristics of the balls (such as colour) or features added to the balls to enable them to be electronically monitored and discriminated by some form of sensor(s) arranged in an electronic circuit in electrical/data communication with the game controller 60A to communicate data identifying the balls such that the game controller 60A can apply the rules 641A.

Where bonuses are cash prizes, they can be paid out via the credit mechanism in a conventional manner or paid out by an attendant if they exceed a certain amount. The terminal may also include a ticket printer arranged to print tickets having a face value which can be redeemed at a cashier.

EXAMPLES

Example 1

Extra Spend Bonuses at the End of the Game

Event	Bonus
All pockets receive at least one ball Balls sunk in the order of their number All odd numbers sunk before even numbers	Free Game \$100 \$10

In this example players would know both the events and bonuses paid before deciding to spend more to qualify for the bonuses.

Example 2

Free Bonuses During the Game

Event	Bonus
Sinking a nominated ball into any pocket Sinking any ball into a specific pocket Sinking in a nominated ball and pocket	Extra points Extra points Extra shot

In this example the player decides whether to go for the event in the hope of gaining an advantage over his opponent. It is also a means whereby players can play by themselves and be challenged by the table.

It will be understood to persons skilled in the art of the invention that many modifications may be made without departing from the spirit and scope of the invention. In particular, that further embodiments can be formed by combining features from the above embodiments and examples.

It is to be understood that, if any prior art publication is referred to herein, such reference does not constitute an admission that the publication forms a part of the common general knowledge in the art, in Australia or any other country.

In the claims which follow and in the preceding description of the invention, except where the context indicates otherwise due to express language or necessary implication, the word "comprise" or variations such as "comprises" or "comprising" is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

11

It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments and/or aspects without departing from the spirit or scope of the invention as broadly described. The present embodiments and 5 aspects are, therefore, to be considered in all respects as illustrative and not restrictive. Several embodiments are described above with reference to the drawings. These drawings illustrate certain details of specific embodiments that implement the systems and methods and programs of the present invention. However, describing the invention with drawings should not be construed as imposing on the invention any limitations associated with features shown in the drawings. The present invention contemplates methods, systems and program products on any electronic device and/or 15 machine-readable media suitable for accomplishing its operations. Certain embodiments of the present invention may be implemented using an existing computer processor and/or by a special purpose computer processor incorporated for this or another purpose or by a hardwired system, for 20

Embodiments within the scope of the present invention include program products comprising machine-readable media for carrying or having machine-executable instructions or data structures stored thereon. Such machine-read- 25 able media can be any available media that can be accessed by a general purpose or special purpose computer or other machine with a processor. By way of example, such machinereadable media may comprise RAM, ROM, PROM, EPROM, EEPROM, Flash, CD-ROM or other optical disk storage, 30 magnetic disk storage or other magnetic storage devices, or any other medium which can be used to carry or store desired program code in the form of machine-executable instructions or data structures and which can be accessed by a general purpose or special purpose computer or other machine with a 35 processor. When information is transferred or provided over a network or another communications connection (either hardwired, wireless, or a combination of hardwired or wireless) to a machine, the machine properly views the connection as a machine-readable medium. Thus, any such a connection is 40 properly termed a machine-readable medium. Combinations of the above are also included within the scope of machinereadable media. Machine-executable instructions comprise, for example, instructions and data which cause a general purpose computer, special purpose computer, or special pur- 45 pose processing machines to perform a certain function or group of functions.

The invention claimed is:

- 1. A gaming system comprising:
- a player interface comprising a display and a game play mechanism;
- a game controller arranged to:
- conduct a table game and display the table game on the display, the table game being of the type where a player 55 seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game by operating the game play mechanism;
- required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event; and
- monitor play of the table game to determine whether the player achieves the event and the bonus should be 65 awarded to the player,
- wherein the event is selected from the group comprising:

12

- the order in which the balls are sunk into any of the
- the order in which the balls are sunk into specific pockets:
- the order in which a certain subset of the balls are sunk into any pocket; and
- the order in which a certain subset of balls are sunk into specific pockets.
- 2. A gaming system as claimed in claim 1, wherein the game controller comprises a table game play implementer arranged to implement play of the table game.
- 3. A gaming system as claimed in claim 1, wherein the game controller comprises an event monitor arranged to monitor for the occurrence of an event.
- 4. A gaming system as claimed in claim 1, wherein the game controller comprises a bonus awarder arranged to make an award to the player.
- 5. A gaming system as claimed in claim 1, wherein there are a plurality of bonuses associated with respective ones of a plurality of different events.
- 6. A gaming system as claimed in claim 1, wherein an event comprises a plurality of sub-events.
- 7. A gaming system as claimed in claim 1, arranged to notify each event to the player prior to commencement of play of the table game.
- **8**. A gaming system as claimed in claim **1**, arranged to notify each event to the player subsequent to receipt of the wager.
- 9. A gaming system as claimed in claim 1, arranged to notify the player of an opportunity to achieve an event and receive the wager as a response to the offer.
- 10. A gaming system as claimed in claim 5, wherein different wager amounts entitle the player to play for different
- 11. A game controller for a gaming system, the game controller arranged to:
 - conduct a table game and display the table game on the display, the table game being of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game by operating a game play mechanism;
 - receive a wager from a player additional to any amount required to play the table game, the wager entitling the player to receive at least one bonus associated with an event if the player achieves the event; and
 - monitor play of the table game to determine whether the player achieves the event and the bonus should be awarded to the player,
 - wherein the event is selected from the group comprising: the order in which the balls are sunk into any of the pockets;
 - the order in which the balls are sunk into specific pock-
 - the order in which a certain subset of the balls are sunk into any pocket; and
 - the order in which a certain subset of balls are sunk into specific pockets.
- 12. A non-transitory computer readable medium including receive a wager from a player additional to any amount 60 computer program code which when executed implements a method for gaming comprising:
 - providing a table game of the type where a player seeks to sink one or more balls of a set of balls in one or more pockets of the table by striking the balls with a cue ball in accordance with the rules of the table game;
 - receiving a wager from a player additional to any amount required to play the table game, the wager entitling the

13 14

player to receive at least one bonus associated with an	
event if the player achieves the event; and	
electronically monitoring play of the table game to deter-	
mine whether the player achieves the event and the	
bonus should be awarded to the player,	5
wherein the event is selected from the group comprising:	
the order in which the balls are sunk into any of the	
pockets;	
the order in which the balls are sunk into specific pock-	
ets;	10

ets; the order in which a certain subset of the balls are sunk into any pocket; and the order in which a certain subset of balls are sunk into specific pockets.

* * * * *